Claims

1. An electronic product, which comprises an alloy being electromigration effect-insignificant as a conduction wire, wherein said alloy is composed of i types of metals, and

$$-1 < z = \sum_i x_i z_i < 1$$

wherein i is an integer greater than 1;

$x_i$ is the mole fraction of the $i^{th}$ metal;

$z_i$ is the effective charge number of the $i^{th}$ metal; and

$z$ is the effective charge number of the alloy.

2. The electric product as claimed in Claim 1, wherein i is 2 or 3.

3. The electric product as claimed in Claim 1, wherein the absolute value of z is smaller than 0.1.

4. The electric product as claimed in Claim 3, wherein said alloy is composed of 0.7 mole fraction of Co and 0.3 mole fraction of Ni.

5. The electric product as claimed in Claim 3, wherein said alloy is composed of 0.0769 mole fraction of Al and 0.9231 mole fraction of Mg.

6. The electric product as claimed in Claim 3, wherein said alloy is consisted of 0.1177 mole fraction of Ag and 0.8823 mole fraction of Mg.

7. A method for designing an alloy, which comprises:

a) determining the effective charge number z of said alloy;

b) selecting i types of constituent metals wherein i is an integer greater than 1; and

c) calculating the mole fraction $x_i$ of each constituent metal according to the following formula:

$$z = \sum_i x_i z_i$$

$x_1 + x_2 + \ldots + x_i = 1$

wherein $z_i$ is the effective charge number of the $i^{th}$ constituent metal,

d) mixing said i types of constituent metals according to the mole fractions of Step c) and melting the mixture to form an alloy.

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